

**REMARKS**

Claims 23-28 and 35 remain pending in the above-identified application. In the non-final Office Action dated October 30, 2006, the Examiner made the following disposition:

- A.) Objected to claims 23 and 35.
- B.) Rejected claims 23-25 and 35 under 35 U.S.C. §103(a) as being unpatentable over *Isoyama, et al.*
- C.) Rejected claims 26-28 under 35 U.S.C. §103(a) as being unpatentable over *Isoyama, et al.* in view of *Miyasaka*.

Applicants respectfully traverse the rejections and address the Examiner's disposition below.

- A.) Objection to claims 23 and 35:

Claims 23 and 35 have been amended as per the Examiner's request to overcome the objection.

Applicants respectfully submit the objection has been overcome and request that it be withdrawn.

- B.) Rejection of claims 23-25 and 35 under 35 U.S.C. §103(a) as being unpatentable over *Isoyama, et al.*:

Applicants respectfully traverse the rejection.

Independent claims 23 and 35 each claim subject matter relating to a method of producing a positive electrode active material for a non-aqueous electrolyte cell. The method comprises the sequence steps of: (1) mixing ingredients of a lithium composite manganese oxide; (2) molding the mixture under pressure; and (3) sintering the molded mixture at a temperature not lower than 600°C and not higher than 850°C. The positive electrode active material comprises lithium composite manganese oxide having a spinel structure whose primary particle diameter is not less than 0.05 µm and not greater than 10 µm forming an aggregate, and whose

specific surface area measured by the BET method is not less than  $0.2 \text{ m}^2/\text{g}$  and not greater than  $2 \text{ m}^2/\text{g}$ .

As described in Applicants' specification, Applicants' claimed specific surface area as measured by the BET method is achieved by molding the mixture under pressure prior to sintering the molded mixture. *Specification*, page 6, lines 9-12; page 10, line 15-page 11, line 20. As described with reference to Table 1 on page 11 of the Specification, Comparative Examples are sintered without first molding under pressure and thus have a specific surface area that is outside of Applicants' claimed range. When the mixture is molded under pressure prior to sintering, voids are present in the molded mixture. These voids contribute to the claimed specific area when the molded mixture is then sintered. These voids are not present when the mixture is not first pressure molded, and thus a non-pressure-molded mixture does not achieve Applicants' claimed specific surface area after sintering.

This is clearly unlike *Isoyama*, which fails to disclose or suggest Applicants' claimed sequence of steps of molding a mixture under pressure before sintering and fails to disclose or suggest Applicants' claimed specific surface area when measured using the BET method. *Isoyama* discloses a process of producing a non-aqueous electrolyte secondary cell. As acknowledged by the Examiner, unlike Applicants' claimed method which molds a mixture under pressure before sintering, *Isoyama's* method does not mold a mixture under pressure before sintering. *Office Action of 10/30/2006*, page 4. Further, as acknowledged by the Examiner, *Isoyama* fails to disclose Applicants' claimed specific surface area. *Id.* Yet, the Examiner argues 1) that it would have been obvious to mold *Isoyama's* mixture under pressure before sintering and 2) that *Isoyama's* material inherently possesses Applicants' claimed specific surface area. *Id.* Applicants disagree.

To begin with, nowhere does *Isoyama* suggest molding its mixture under pressure prior to sintering. *Isoyama* merely teaches molding its mixture after sintering, and fails to suggest otherwise. Further, nowhere does *Isoyama* suggest Applicants' claimed specific surface area as measured by the BET method. As described in Applicants' specification, Applicants' claimed specific surface area is achieved by molding the mixture under pressure prior to sintering the molded mixture. *Specification*, page 6, lines 9-12; page 10, line 15-page 11, line 20. For example, as shown in Table 1 of Applicants' Specification, Examples consistent with the claimed invention achieve the claimed specific surface area by molding under pressure prior to

sintering. On the other hand, Comparative Examples that are not consistent with the claimed invention are sintered without first molding under pressure and have a specific surface area that is outside of Applicants' claimed range. Similar to the Comparative Examples described in Table 1 of Applicants' Specification, *Isoyama* sinters its mixture without first molding under pressure, and thus exhibits a specific surface area that is outside of Applicants' claimed range.

The Examiner argues that *Isoyama's* material inherently possesses Applicants' claimed specific surface area. Applicants' disagree. The Examiner merely alleges that *Isoyama* possesses the claimed specific surface area, but fails to establish that the claimed specific surface area is necessarily present. To establish inherency, a reference "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." . . . "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950 (Fed. Cir. 1999). *Isoyama* describes forming a material that has a "large" surface area. *Isoyama* 60:19-23. Further, *Isoyama* describes that its large surface area is achieved by using icularly-shaped particles instead of spherical particles. *Isoyama* fails to describe how to achieve Applicants' claimed specific surface area as measured by the BET method. Although *Isoyama's* particles may allegedly have a same diameter as Applicants' claimed particles, *Isoyama's* particles do not inherently have Applicants' claimed specific surface area. For example, *Isoyama's* icularly-shaped particles may be too long or too short to achieve Applicants' claimed specific surface area. Further, *Isoyama's* particles are not formed with the types of voids that would be formed about them had the particles been sintered after pressure molding. Thus, Applicant's claimed specific surface area is not necessarily present in *Isoyama*. *Isoyama's* particles simply do not necessarily possess Applicant's claimed specific surface area. Accordingly, it is incorrect to assume that this is inherently found in *Isoyama*.

Claims 24 and 25 depend directly or indirectly from claim 23 and are therefore allowable for at least the same reasons that claim 23 is allowable.

Applicants respectfully submit the rejection has been overcome and request that it be withdrawn.

C.) Rejection of claims 26-28 under 35 U.S.C. §103(a) as being unpatentable over *Isoyama, et al.* in view of *Miyasaka*:

Applicants respectfully traverse the rejection.

Independent claim 23 is allowable over *Isoyama* as discussed above. *Miyasaka* still fails to disclose or suggest Applicants' claimed sequence of steps of molding a mixture under pressure before sintering and fails to disclose or suggest Applicants' claimed specific surface area as measured by the BET method. Therefore, *Isoyama* in view of *Miyasaka* still fails to disclose or suggest claim 23.

Claims 26-28 depend directly or indirectly from claim 23 and are therefore allowable for at least the same reasons that claim 23 is allowable.

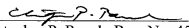
Applicants respectfully submit the rejection has been overcome and request that it be withdrawn.

Conclusion

As Applicants believe the application is in condition for allowance, a favorable action and a Notice of Allowance are respectfully requested.

Respectfully submitted,

SONNENSCHN NATH & ROSENTHAL LLP

By:   
Christopher P. Rauch, Reg. No. 45,034  
SONNENSCHN NATH & ROSENTHAL LLP  
P.O. Box 061080  
Wacker Drive Station, Sears Tower  
Chicago, Illinois 60606-1080  
Tel. No. (312) 876-8000  
Customer No. 26263

ATTORNEYS FOR APPLICANT